

EXTRUSION METHOD AND APPARATUS
FOR CERAMIC HONEYCOMB ARTICLES

This application is a divisional of 09/527,731, filed 03/17/200, now U.S. Pat.
6,375,450.

BACKGROUND OF THE INVENTION

This invention relates to an improvement in a method for extruding ceramic honeycomb articles, in particular ultra-thinwall ceramic honeycomb articles having 4 mil cell walls or less, and an apparatus for carrying out the same.

Twin screw extruders are commonly employed in the manufacturing of ceramic honeycomb articles. US Pat. No. 4,551,295, herein incorporated by reference in its entirety, is directed at a method of using a twin screw extruder to produce cordierite or cordierite-mullite honeycomb cellular substrates for employment as catalytic converters in automotive engines.

In an effort to meet the demands of ever tighter emission standards, automobile manufacturers are requiring honeycomb cellular substrates with thinner cell walls to provide increased geometric surface area and faster light-off properties.

A problem which presently exists in the manufacturing of ultra-thinwall honeycomb cellular substrates having 4 mil cell walls or less is die plugging. Die plugging leads to missing webs and non-knitting webs in the substrates thus rendering them unusable and resulting in high production losses. It is